WHAT IS CLAIMED IS:

1. A method for synchronizing to a radio signal comprising the steps of:

receiving said radio signal;

determining a first synchronization position for said radio signal using a first synchronization technique;

generating a first channel estimate using said first synchronization position;

determining a second synchronization position for said radio signal using a second synchronization technique, wherein said second synchronization technique is different from said first synchronization technique;

generating a second channel estimate using said second synchronization position; and

selecting one of said first channel estimate and said second channel estimate for use in subsequent processing of said radio signal.

2. The method of claim 1, wherein said step of determining said first synchronization position further comprises the steps of:

correlating said received radio signal to a known sequence to generate a plurality of correlations;

calculating an energy value by summing squared magnitudes of each of said correlations over a predetermined window; and

selecting, as said first synchronization position, a time value which maximizes said energy value.

3. The method of claim 1, wherein said step of determining said second synchronization position further comprises the steps of:

determining a mean position of a correlation function; and

selecting, as said second synchronization position, a time value which corresponds to said mean position.

4.   The method of claim 1, wherein said step of selecting further comprises the step of:

selecting said first channel estimate if time dispersion associated with a radio channel over which said radio signal is received is above a threshold;

5   otherwise, selecting said second channel estimate position.

5.   The method of claim 1, further comprising the step of:

using said selected channel estimate to equalize said received signal.

6.   The method of claim 1, wherein said radio signal includes a
10   plurality of frames, each of which includes a known sequence.

7.   A receiver comprising:

means for receiving a radio signal;

means for determining a first synchronization position for said radio signal using a first synchronization technique;

15   means for generating a first channel estimate using said first synchronization position;

means for determining a second synchronization position for said radio signal using a second synchronization technique, wherein said second synchronization technique is different from said first synchronization technique;

20   means for generating a second channel estimate using said second synchronization position; and

means for selecting one of said first channel estimate and said second channel estimate for use in subsequent processing of said radio signal.

8.   The receiver of claim 7, wherein said means for determining said
25   first synchronization position further comprise:

means for correlating said received radio signal to a known sequence to generate a plurality of correlations;

means for calculating an energy value by summing squared magnitudes of each of said correlations over a predetermined window; and

5   means for selecting, as said first synchronization position, a time value which maximizes said energy value.

9.   The receiver of claim 7, wherein said means for determining said second synchronization position further comprises:

means for determining a mean position of a correlation function;

10   and

means for selecting, as said second synchronization position, a time value which corresponds to said mean position.

10.   The receiver of claim 7, wherein said means for selecting further comprises:

15   means for selecting said first channel estimate if time dispersion associated with a radio channel over which said radio signal is received is above a threshold and, otherwise, selecting said second channel estimate position.

11.   The receiver of claim 7, further comprising:

means for using said selected channel estimate to equalize said

20   received signal.

12.   The receiver of claim 7, wherein said radio signal includes a plurality of frames, each of which includes a known sequence.

13.   The receiver of claim 7, wherein said receiver is disposed in a

25   mobile station.

14.   The receiver of claim 7, wherein said receiver is disposed in a base station.

15.   A receiver comprising:

a downconverter for downconverting a received signal to baseband

5   signal;

a known sequence generator for generating a synchronization sequence;

a first synchronization unit for synchronizing to said baseband signal using a first synchronization technique; and

10   a second synchronization unit for synchronizing to said baseband signal using a second synchronization technique, wherein said first synchronization technique and said second synchronization technique are different.

16.   The receiver of claim 15, wherein said first synchronization unit

15   further comprises:

a correlator for correlating said baseband radio signal to said synchronization sequence to generate a plurality of correlations;

a summer for summing squared magnitudes of each of said correlations over a predetermined window to generate an energy value; and

20   a processor for selecting, as a first synchronization position, a time value which maximizes said energy value.

17.   The receiver of claim 15, wherein said second synchronization unit further comprises:

a correlator for correlating said baseband signal with said

25   synchronization sequence to generate correlation values; and

a processor for determining a mean position associated with said correlation values and for selecting, as a second synchronization position, a time value which corresponds to said mean position.

18.   The method of claim 1, wherein said step of selecting further comprises the step of:

selecting a corresponding one of said first synchronization position and said second synchronization position for use in said subsequent processing of said radio signal.

19.   The receiver of claim 7, wherein said means for selecting further comprises:

means for selecting a corresponding one of said first synchronization position and said second synchronization position for use in said subsequent processing of said radio signal.